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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590 03/20/2006 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213			EXAMINER MISLEH, JUSTIN P	
			ART UNIT	PAPER NUMBER

2612

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/765,369

Applicant(s)

KANAMORI ET AL.

Examiner

Justin P. Misleh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 5 and 7 - 66 is/are pending in the application.
- 4a) Of the above claim(s) 8, 10 - 40, 43 - 47, 49, 54, and 57 - 62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 7, 9, 41, 42, 48, 50 - 53, 55, 56, and 63 - 66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 25, 2005 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed November 25, 2005 have been fully considered but they are not persuasive; although, Applicant's arguments with respect to Claims 1 – 5, 7, 9, and 66 have been considered but are moot in view of the new grounds of rejection.

### **Claims 41 and 42**

3. Initially, Applicant somehow contends that Claim 41/42 requires therein, “a direction of inclination of the display screen is varied depending upon the desired function corresponding to the switch being pressed.” Then, Applicant argues that in Ohishi, “the operation of the buttons is independent of the inclination of the monitor screen rather ‘under a condition’ that the monitor screen is inclined.”

4. The Examiner respectfully disagrees with Applicant's position regarding the claim language and Ohishi. First, a portion of Claim 41/42 recites, “when one of the plurality of

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switches of the switch unit is pressed, the pressed switch functions under a condition that the corresponding display screen is inclined.” In other words, the recited portion of Claim 41 simply requires that the pressed switch may be permitted to function when the display screen is inclined. Second, in the Office Action (August 25, 2005), the Examiner pointed out that in column 8 (lines 1 – 65), Ohishi “details each of the functions of the buttons (11a – 11h) and gives numerous advantages of specific button placement and button operation with respect to the inclination of the monitor screen (3), including the advantage of ‘reduces fatigue of the user’.” Third, Ohishi even indicates, in column 8 (lines 55 – 57), that the camera may be operated using either the finder (12) or the monitor screen (3). Thus, Applicant’s arguments that “the operation of the buttons is independent of the inclination of the monitor screen” is completely erroneous. In fact, Ohishi discloses that the buttons (11a – 11h) may be permitted to function when the display screen is inclined, as required by the recited portion of Claim 41/42.

### **Claim 52**

5. Applicant initially comments, “that the ‘softkeys’ 910a-910d are within the 288x196 pixel that allegedly corresponds to the first display unit ... Therefore, they are not in the vicinity of at an outer periphery of a display of the first display unit as set forth in claim 52.”

6. The Examiner respectfully disagrees with this position. The amended claim recites therein, “an input unit including ... a plurality of switches arranged in the vicinity of an outer periphery of a display of the first display unit.”

7. In the Final Office Action (mailed August 25, 2005), the Examiner mainly relied upon Anderson’s figure 9D to show that the input unit (“Application Graphics Area”) included a

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plurality of switches (Switches 910a – 910c). The Examiner additionally notes that Anderson also shows that the plurality of switches (Switches 910a – 910c) are arranged in the vicinity of an outer periphery of the display of the first display unit (“Application Graphics Area”) at least for the reason that “vicinity of an outer periphery of a display of the first display unit” is written broadly enough such that it allows for the plurality of switches to either be included as part of the first display part or excluded from the first display part. In other words, “vicinity of an outer periphery” is relative to the boundaries of the first display part, wherein the claim language does not specify such boundaries. Thus, Anderson remains applicable to at least this portion of the claim language.

8. Applicant additionally comments, “since the 320 x 240 pixel area (the alleged second display unit) includes the 288 x 196 pixel area (the alleged first display unit), Anderson does not disclose or suggest that the first display unit and the second display unit are disposed on different places, respectively, on the capturing apparatus as set forth in claim 52.”

9. The Examiner respectfully disagrees with this position. The amended claim further recites therein, “wherein the first display unit and the second display unit are disposed on different places, respectively, on the capturing apparatus.”

10. In the Final Office Action, the Examiner mainly relied upon Anderson’s figure 9D to show that an input unit (“Application Graphics Area”) including a first display unit (area corresponding to 288 X 196) and a second display unit (“Softkey Label Area” and “Applications Graphics Area” combined; 320 X 240). Also, in the Final Office Action, the Examiner noted that Applicant had not distinguished between the first and second display units physically and that they have only been distinguished by an assigned label. As noted above, the claim now

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differentiates between the first and second display units by requiring that they be disposed on different places on the capturing apparatus.

11. The Examiner further notes Anderson continues to anticipate at least this portion of the claim language for the reason the second display unit (“Softkey Label Area” and “Applications Graphic Area” combined) is larger and fully physically incorporates the first display unit (“Applications Graphics Area”). Since the second display unit is not physically identical to the first display unit it cannot possibly be disposed on the same place on the capturing apparatus as the first display unit.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. **Claims 41, 42, 48, 50, 63 and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohishi et al.**

14. For **Claim 41**, Ohishi et al. disclose, as shown figure 11, a capturing apparatus (1) for capturing an image, comprising:

a display part (3) arranged to have a display screen (3) inclined with respect to a plane of a body face (the plane of first housing 2) of said capturing apparatus (1); and

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a switch unit (11) including a plurality of switches (11a – 11h) arranged in surroundings of said display part (3),

wherein, when one of the plurality of switches of the switch unit is pressed, the pressed switch functions under a condition that the corresponding display screen is inclined (see detailed explanation below).

Ohishi states, in column 7 (lines 50 – 53), “of the three operating portions 11, two are required for videoing and are mounted on the upper surfaces of the third and fourth housings 9 and 10, respectively.” Furthermore, in column 8 (lines 1 – 65), Ohishi details each of the functions of the buttons (11a – 11h) and gives numerous advantages of specific button placement and button operation with respect to the inclination of the monitor screen (3), including the advantage of “reduces fatigue of the user”. The above teachings of Ohishi are a clear indication that pressing the buttons 11a-11h on operating panel 11 and the inclination of the monitor screen 3 are interrelated; hence, Ohishi does in fact disclose when one of the buttons is pressed, the button functions under a condition corresponding to the inclination of the monitor screen.

15. For **Claim 42**, Ohishi et al. disclose, as shown figure 11 and as stated in column 6 (lines 64 – 67), a capturing apparatus (1) for capturing an image, comprising:

a display part (3) comprising a display screen (3); and

a switch unit (11) including at least one switch (11i – 11p) arranged in surroundings (surrounding the bottom of the display part 3) of said display part (3), said switch unit (11) being inclined with respect to a plane of a body face (first housing 2) of the capturing apparatus (1),

wherein, when one of the plurality of switches of the switch unit is pressed, the pressed switch functions under a condition that the corresponding display screen is inclined (see detailed explanation below).

Ohishi states, in column 7 (lines 50 – 53), “of the three operating portions 11, two are required for videoing and are mounted on the upper surfaces of the third and fourth housings 9 and 10, respectively.” Furthermore, in column 8 (lines 1 – 65), Ohishi details each of the functions of the buttons (11a – 11h) and gives numerous advantages of specific button placement and button operation with respect to the inclination of the monitor screen (3), including the advantage of “reduces fatigue of the user”. The above teachings of Ohishi are a clear indication that pressing the buttons 11a-11h on operating panel 11 and the inclination of the monitor screen 3 are interrelated; hence, Ohishi does in fact disclose when one of the buttons is pressed, the button functions under a condition corresponding to the inclination of the monitor screen.

16. As for **Claim 48**, Ohishi et al. disclose, as shown in figure 11, wherein an input unit (11o) is arranged on an upper-right side of a center (approximately at the location of switches 11l and 11m) of a face (first housing face 2) of said capturing apparatus (1) that faces a user when being used (first housing is the rear face of the capturing apparatus, see figure 15).

17. As for **Claim 50**, Ohishi et al. disclose, as stated in column 10 (lines 15 – 20), wherein said display part (3) have at least one of a function of displaying information related to functions assigned to said switches in the vicinity of said display respectively corresponding to said switches and a function of displaying information related to an operation state of said capturing apparatus (The display part 3 displays captured images in recording operation state.).



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18. As for **Claims 63 and 64**, Ohishi et al. disclose, as stated in column 8 (lines 1 – 8), wherein at least one switch (11d) of the switch unit (11) is provided for performing zooming during videoing. Hence, the display part (3) is arranged to display information (a zoomed image) related to an operation state (videoing operation) of an apparatus (video camera 1) used together with the switch unit (11), and wherein the information displayed (zoomed image) on the display part (3) indicates a function (zoom function) of the switch unit (at least switch 11d).

19. **Claims 52, 53, 55, 56 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson.**

20. For **Claim 52**, Anderson discloses, as shown in figures 3, 8, and 9D and as stated in column 11 (line 34) – column 12 (line 58), a capturing apparatus (810) for capturing an image, comprising:

an input unit (“Application Graphics Area”) including a first display unit (area corresponding 288 X 196) operable to display a first displayed information (Application Graphics) and a plurality of switches (Switches 910a – 910c) arranged in the vicinity of an outer periphery of a display of the first display unit (see first of three items below for explanation) to form at least one pair (Up/Down/Left/Right), said switches of each of said at least one pair being opposed to each other with said first display unit sandwiched therebetween (Figure 9D clearly shows how the display area is sandwiched between the switches 910a – 910d.); and

a second display unit (“Softkey Label Area” and “Applications Graphic Area” combined; 320 X 240; it is important to note that Applicant does not distinguish between the first and second display physically, only by an assigned label),

wherein said first displayed information includes information indicating functions assigned to said plurality of switches (The arrows assigned to the switches indicate up/down/left/right cycling/scrolling functions of the switches.), and a means is provided for incorporating at least a part of said first displayed information, including said functions, into said second display unit (The switches in the “Applications Graphics Area” is incorporated into the second display unit, which corresponds to the combined “Softkey Label Area” and “Applications Graphic Area” display area.),

wherein said at least one pair of switches are mechanical switches (see second of three items below for explanation), and

wherein the first display unit and the second display unit are disposed on different places, respectively, on the capturing apparatus (see third of three items below for explanation.).

1) As stated above, Anderson’s figure 9D shows that the input unit (“Application Graphics Area”) included a plurality of switches (Switches 910a – 910c). The Examiner additionally notes that Anderson also shows that the plurality of switches (Switches 910a – 910c) are arranged in the vicinity of an outer periphery of the display of the first display unit (“Application Graphics Area”) at least for the reason that “vicinity of an outer periphery of a display of the first display unit” is written broadly enough such that it allows for the plurality of switches to either be included as part of the first display part or excluded from the first display part. In other words, “vicinity of an outer periphery” is relative to the boundaries of the first display part, wherein the claim language does not specify such boundaries.

2) Anderson indicates that the switches (910a – 910d) are to be pressed by a user via the touch-screen (800; see column 11, lines 40 – 62). In other words, the switches (910a – 910d) are

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not activated by a mouse or any other software-based pointing device; hence, the switches (910a – 910d) are in fact mechanical switches and not electronic switches as alleged by Applicant.

3) As stated above, Anderson's figure 9D shows that an input unit ("Application Graphics Area") including a first display unit (area corresponding to 288 X 196) and a second display unit ("Softkey Label Area" and "Applications Graphics Area" combined; 320 X 240). Also, in the Final Office Action, the Examiner noted that Applicant had not distinguished between the first and second display units physically and that they have only been distinguished by an assigned label. As noted above, the claim now differentiates between the first and second display units by requiring that they be disposed on different places on the capturing apparatus.

The Examiner further notes Anderson continues to anticipate at least this portion of the claim language for the reason the second display unit ("Softkey Label Area" and "Applications Graphic Area" combined) is larger and fully physically incorporates the first display unit ("Applications Graphics Area"). Since the second display unit is not physically identical to the first display unit it cannot possibly be disposed on the same place on the capturing apparatus as the first display unit.

21. As for **Claim 53**, the claim language requires therein wherein said input unit is arranged on an upper-right side of a center of a face of said capturing apparatus that faces a user when said capturing apparatus is used. This limitation is written broadly enough that the input unit is not required to be arranged ONLY on an upper-right side but that it can be arranged on other sides including an upper-right side. If an input unit is arranged such that it is on all sides of a center of a face of said capturing apparatus that faces a user when said capturing apparatus is used, then the input unit satisfies the limitation.

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Anderson discloses, as shown in figures 8 and 9D, the input unit (“Applications Graphics Area”) is arranged such that it is on all sides of a center of a face of said capturing apparatus that faces a user when said capturing apparatus is used.

Furthermore, Anderson discloses wherein said second display unit (“Softkey Label Area” and “Applications Graphic Area” combined; 320 X 240) is arranged to display said first display information (Application Graphics) when one of said switches arranged at an upper position of a left position with respect to said first display is operated (When the switches are operated, they are displayed in an opaque state, see column 12, lines 35 – 58.).

22. As for **Claim 55**, Anderson discloses, as shown in figure 9D, wherein said switches (910a – 910d) are arranged approximately at an upper position (910a), a lower position (910c), a right position (910b) and a left position (910d) with respect to said first display unit (“Applications Graphics Area”).

23. As for **Claim 56**, Anderson discloses, as shown in figures 8 and 9D, wherein said input unit and said second display unit are arranged on the same plane of a body face of said capturing apparatus (back of camera facing the user).

24. As for **Claim 65**, Anderson discloses, as shown in figures 9C and 9D, a body (touch screen 800) on which the first display unit (portion corresponding to 228 X 196) and the second display unit (Softkey Label Area) are arranged independently (Anderson explicitly shows that the second display unit is in the “Border Area” of the first display unit.)

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25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claims 1 – 5, 7, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. in view of Swayze.**

27. For **Claim 1**, Hirose et al. disclose, as shown in figures 3 – 5 and 8 – 10 and as stated in columns 2 (lines 32 – 51 and 60 – 65), 3 (lines 58 – 65), and 4 (lines 4 – 56), an input unit comprising:

an instruction input unit (design display portion 14 @ “approximate central portion”) including a display part (LCD 17), a posture of said instruction input unit (design display portion 14) capable of being displaced (in a downward fashion as indicated in column 3, lines 1 – 33) by a pressure applied to a first face (design display portion 14) thereof including a display screen (LCD 17) of said display part (LCD 17);

a switch pressing unit (display surface 13 @ peripheral portions “surrounding the design display portion 14”) provided in the vicinity of an outer periphery of a face (display surface 13 other than said first face (design display portion 14) of said instruction input unit (design display portion 14), said switch pressing unit (display surface 13) being capable of being displaced in accordance with the displacement of the instruction input unit (in a downward fashion as indicated in column 3, lines 1 – 33); and

a switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32) arranged to work by being pressed by said switch pressing unit (display surface 13),

wherein said display part is arranged to display information related to an operation state of an apparatus used together with said input unit (see 1<sup>st</sup> detailed explanation paragraph below), and

wherein the information displayed on said display part indicates a function of the switch pressing unit (see 2nd detailed explanation paragraph below).

1) Hirose et al. provides a push-button input unit comprising a central display portion (14) and a peripheral portion (14) surrounding the central display portion (14), wherein pressure applied to either the central display portion (14) and/or the peripheral portion (13) will cause the downwardly projecting shaft (31) of the plunger (29) to connect with lead-out terminals within the operating shaft (34) of the switch body (32). Therefore, the switch pressing unit (13) is displaced in accordance with the instruction input unit (14). Hence, Hirose et al. disclose, as shown in figures 8 – 10 and as stated in column 4 (lines 4 – 56), wherein said display part (LCD 17) is arranged to display information related to an operation state of an apparatus (e.g. keyboard) used together with said input unit. Also, the hooked-shaped display portions (15) provided in the switch pressing unit (13) and the display (17) provided in the instruction input unit (14) are operable to represent various modes (see figures 8 – 10) by displaying a plurality of functions (see “the advantages” in column 4).

2) Hirose et al. disclose in column 3 (lines 36 – 65), “the design display portion 14 can present ... a display of a plurality of functions ... from an external unit ... a display for selecting a plurality of loads ... and a display conforming to a mode.” The above teaching of Hirose et al. are a clear indication that the display portion (14) of the switch (11) is displaying information

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relating to a function of the switch (11); hence, Hirose et al. do in fact disclose displaying of information indicating the function of the switch.

While Hirose et al. disclose a switch part including a plunger (29), a projecting shaft (31), an operating shaft (34), and a switch body (32), as shown in figure 4; Hirose et al. do not disclose wherein said switch part includes a plurality of switches each respective switch having a different function.

In analogous art, Swayze also disclose an input unit comprising an instruction input unit and a switch part. More specifically, Swayze teach, as shown in figure 2 and 4 and as stated in columns 5 (lines 54 – 67) and 6 (lines 1 – 9), a switch part (four-way directional interface 70) including a plurality of switches (128, 130, 132, and 134) with each respective switch having a different function (see column 4, lines 30 – 46, and column 5, lines 27 – 42).

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included the four-way directional switch part teaching of Swayze, in the instruction input unit disclosed by Hirose et al., for the advantage of integrating mode selection into a single control presentation that intuitively allows the user to cycle through available choices and options with a minimum of hassle (see Swayze; column 2, lines 57 – 63).

28. As for **Claim 2**, Hirose et al. disclose wherein said instruction input unit (13) presses said switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32) via said switch pressing unit (display surface 13) by being displaced around a position in the vicinity of a center of gravity thereof as a displacement center in a direction perpendicular to a face on which said switch part is provided.

The switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32), the instruction input unit (14) and the switch pressing unit (13) lie within a plane(s) parallel to the plane of which the display (17) resides, as shown clearly in figure 4. The displacement center corresponds to the center of gravity of the instruction input unit (13), the switch pressing unit (14), and the switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32) such that the displacement direction is perpendicular to the instruction input unit (13) plane, the switch pressing unit (14) plane; and the switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32) plane. In other words, the displacement corresponds to an up and down displacement and not a lateral displacement.

29. As for **Claim 66**, Swayze teach, as shown in figure 2 and 4 and as stated in columns 5 (lines 54 – 67) and 6 (lines 1 – 9), a switch part (four-way directional interface 70) includes switches (128, 130, 132, and 134) arranged to form at least one pair (up/down 132/134 and left/right 128/130), said switches (128 – 134) of each of said at least one pair being opposed to each other with said displacement center (90) sandwiched therebetween. Further, Swayze teach that the switch part (70) is configured to pivot around said displacement center when pressed.

30. As for **Claim 3**, Swayze teach, as shown in figure 2 and 4 and as stated in columns 5 (lines 54 – 67) and 6 (lines 1 – 9), a switch part (four-way directional interface 70) includes switches (128, 130, 132, and 134) arranged to form at least one pair (up/down 132/134 and left/right 128/130), said switches (128 – 134) of each of said at least one pair being opposed to each other with said displacement center (90) sandwiched therebetween.

31. As for **Claim 4**, Swayze teach, as shown in figure 2 and 4 and as stated in columns 5 (lines 54 – 67) and 6 (lines 1 – 9), a switch part (four-way directional interface 70) includes



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switches (128, 130, 132, and 134) arranged substantially at an upper position (132), a lower position (134), a right position (130) and a left position (128) with respect to a displacement center (90).

32. As for **Claim 5**, Hirose et al. disclose, as shown in figures 8 – 10 and as stated in column 4 (lines 4 – 56), wherein said display part (LCD 17) is arranged to display information related to functions assigned to switches included in said switch part in the vicinity of said switches, respectively.

The hooked-shaped display portions (15) provided in the switch pressing unit (13) and the display (17) provided in the instruction input unit (14) are operable to represent various modes (see figures 8 – 10) by displaying a plurality of functions (see “the advantages” in column 4).

33. As for **Claim 7**, Hirose et al. disclose, as shown in figures 8 – 10 and as stated in columns 2 (lines 43 – 46) and 4 (lines 4 – 56), wherein said display part (LCD 17) is arranged to display one of a plurality of background colors that is determined in accordance with an operation state of an apparatus (e.g. keyboard) used together with said input unit.

The hooked-shaped display portions (15) provided in the switch pressing unit (13) and the display (17) provided in the instruction input unit (14) are operable to represent various modes (see figures 8 – 10) by displaying a plurality of functions (see “the advantages” in column 4).

34. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Swayze in view of Hirose et al.

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35. For **Claim 9**, Swayze discloses, as shown in figure 2 – 4 and as stated in columns 4 (lines 30 – 46), 5 (lines 27 – 42 and lines 54 – 67), and 6 (lines 1 – 9), a digital camera (40), comprising:

- an image capturing unit (44);

- a controlling unit (62) that controls the image capturing unit (44);

- a processing circuit (62) that processes signals from the image capturing unit (44);

- a display unit (60); and

- an operating unit (70) that accepts user input and includes an input unit (78), said input unit (78) comprising:

  - an instruction input unit (78), a posture of said instruction input unit capable of being displaced by a pressure applied to a first face (78) thereof (see figure 4);

  - a switch pressing unit (72) provided in the vicinity of an outer periphery of a face (82) other than a first face (78) of said instruction input unit (78), said switch pressing unit being capable of being displaced in accordance with the displacement of the instruction input unit (see column 4, lines 30 – 46);

  - a switch part (86) arranged to work by being pressed by said switch pressing unit (72).

However, Swayze does not disclose wherein the instruction input unit includes a display part, wherein the first face of the instruction input unit includes a display screen of the display part, wherein said display part is arranged to display information related to an operation state of an apparatus used together with said input unit, and wherein the information displayed on said display part indicates a function of the respective switch pressed by the switch pressing unit.

On the other hand and in analogous art, Hirose et al. also disclose a novel input unit for use in an electronic device. More specifically, Hirose et al. teach, as shown in figures 3 – 5 and 8 – 10 and as stated in columns 2 (lines 32 – 51 and 60 – 65), 3 (lines 58 – 65), and 4 (lines 4 – 56), an input unit with an instruction input unit (design display portion 14 @ “approximate central portion”) including a display part (LCD 17) and a first face (design display portion 14) thereof, wherein said first face includes a display screen (LCD 17) of said display part (LCD 17). Hirose et al. further teach a switch part (plunger 29; projecting shaft 31; operating shaft 34; and switch body 32), of a switch pressing unit (display surface 13), arranged to work by being pressed by said switch pressing unit (display surface 13). Finally, Hirose et al. teach wherein said display part is arranged to display information related to an operation state of an apparatus used together with said input unit (see 1<sup>st</sup> detailed explanation paragraph below) and wherein the information displayed on said display part indicates a function of the switch pressing unit (see 2nd detailed explanation paragraph below).

1) Hirose et al. provides a push-button input unit comprising a central display portion (14) and a peripheral portion (14) surrounding the central display portion (14), wherein pressure applied to either the central display portion (14) and/or the peripheral portion (13) will cause the downwardly projecting shaft (31) of the plunger (29) to connect with lead-out terminals within the operating shaft (34) of the switch body (32). Therefore, the switch pressing unit (13) is displaced in accordance with the instruction input unit (14). Hence, Hirose et al. disclose, as shown in figures 8 – 10 and as stated in column 4 (lines 4 – 56), wherein said display part (LCD 17) is arranged to display information related to an operation state of an apparatus (e.g. keyboard) used together with said input unit. Also, the hooked-shaped display portions (15)

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provided in the switch pressing unit (13) and the display (17) provided in the instruction input unit (14) are operable to represent various modes (see figures 8 – 10) by displaying a plurality of functions (see “the advantages” in column 4).

2) Hirose et al. disclose in column 3 (lines 36 – 65), “the design display portion 14 can present ... a display of a plurality of functions ... from an external unit ... a display for selecting a plurality of loads ... and a display conforming to a mode.” The above teaching of Hirose et al. are a clear indication that the display portion (14) of the switch (11) is displaying information relating to a function of the switch (11); hence, Hirose et al. do in fact disclose displaying of information indicating the function of the switch.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included an instruction input unit that includes a display part, wherein the first face of the instruction input unit includes a display screen of the display part, wherein said display part is arranged to display information related to an operation state of an apparatus used together with said input unit, and wherein the information displayed on said display part indicates a function of the respective switch pressed by the switch pressing unit, as taught by Hirose et al., in the instruction input unit, disclosed by Swayze, for the advantage of providing an input unit that is readily distinguished in natural light environments (see Hirose et al.; column 1, lines 50 – 66).

**36. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohishi et al. in view of Hirose et al.**

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37. As for **Claim 51**, while Ohishi et al. disclose an image capturing apparatus (1) including a display part (3) and various modes of operation including a recording mode and reproduction mode (see column 10, lines 15 – 29) wherein images are displayed on the display part (3); Ohishi et al. do not disclose wherein the display part (3), during various operating modes, selects a background color for display from a plurality of background colors.

On the other hand, Hirose et al. also disclose an apparatus comprising a display part. More specifically, Hirose et al. teach, as shown in figures 4, 5, and 8 – 10 and as stated in columns 2 (lines 43 – 46) and 4 (lines 4 – 56), wherein the display part (3) selects a background color for display corresponding to a particular operating mode of the apparatus.

As stated in column 1 (lines 60 – 65), at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included the selected background color display part teaching of Hirose et al. in the image capturing apparatus with display part disclosed by Ohishi et al. for the advantage of providing a distinguishable display even in all lighting conditions in all environments.

### ***Conclusion***

38. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

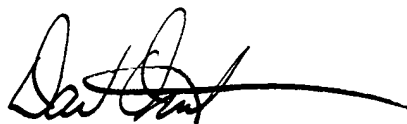
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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

March 15, 2006

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal flourish extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER